Morris (M)

# MEDICAL SUPERVISION,

IN DISTINCTION FROM

# MEDICAL SELECTION IN LIFE INSURANCE.

# QUARTERLY REPORT,

By Moreau Morris, M. D., Surgeon-in-Chief and Vice-President of the
American Popular Life Insurance Company.

GEN'L'S

[Formerly Sanitary Superintendent Health Department, N. Y. City.]

## APPENDIX.

CONFIRMATORY EVIDENCE OF THE VALUE OF MEDICAL SUPERVISION. By T. S. LAMBERT, M.D., President.

REMARKS UPON BIOMETRY INCIDENTAL TO DR. MORRIS' REPORT. By W. H. DWINELLE, M.D.

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6.-WHO SHOULD INSURE?

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- 2. Plain and interesting answers to the questions: What is Insurance? What is Life Insurance? What are the Best Methods of Insurance? By T. S. Lambert, M. D., Pres't, and Fred. Shonnard, (formerly) Sec'y.

# MEDICAL SUPERVISION,

IN DISTINCTION FROM MEDICAL SELECTION IN LIFE INSURANCE.

# QUARTERLY REPORT

OF

## MOREAU MORRIS, M.D.,

Surgeon-in-Chief of the

# AMERICAN POPULAR LIFE

# INSURANCE COMPANY,

PRESENTED TO THE DIRECTORS, OCTOBER 28, 1874, AND ORDERED TO BE PUBLISHED.

"There is a destiny made for a man by his ancestors, and no one can clude, were he able to attempt it, the tyranny of his organization.

"No mortal can transcend his nature."-Maudsley.

## REPORT.

It is an axiom that careful medical selection is one of the main elements of successful life insurance business.

But, although admitting its truth, it must be said, that, as the term "medical selection" is usually understood and applied by life insurance companies, it falls far short of fulfilling the conditions and accomplishing the results naturally expected from what is supposed to be its searching exactness, and is comparatively of but little real value.

This is by no means the fault of Medical Examiners, than whom there probably do not exist more careful, conscientious, painstaking men in any profession or walk of life.

But the great defect lies in the system or method of securing such information as is necessary to form the basis of a proper medical selection, and thereby to judge of the character of the risk.

The question of how to secure the best and most careful medical selection, has long been and still is apparently one of the most difficult to solve. It is the perplexing problem with nearly every life insurance company at the present day, and well it may be in view of the rapidly increasing mortality rates in many of the older companies, and in the younger ones also—of the old plan.

As fond parents view with increasing alarm the rapid decease of child after child of their household from some mysterious fatal disease, they naturally look about for superior medical skill to stay, if possible, the effects of the pestilence. Experienced and wise doctors are summoned to the bedside, and with grave, thoughtful countenances, they shake their heads and say, too late! too late! The disease has sown its seed, its ravages are telling with fatal effect; we cannot suggest better remedies, and unless transfusion of new blood may possibly save, death remains only a question of time.

The question of proper medical selection is indeed one of great significance, it is the corner-stone of the edifice of life insurance; its proper position in that edifice should be well considered; its texture and strength well tested and understood; and when once firmly fixed upon a well-grounded foundation it will remain sound and able to sustain the superstructure, of which it forms so important a part.

But with all due deference to experience whose teachings often fail to be appreciated, it seems to be a patent fact that the solution of this problem must be sought for in other directions, than simply by a change of men, or by more exacting medical qualifications.

No physical exploration can estimate an applicants' probable life expectation; no medical skill nor experience in detecting present disease or impairment, can determine the presence of subtle inherited tendencies to disease that may have remained dormant through several generations, but which only await certain unknown influences to become developed in the applicant. True, as a detective discovers a trace of the culprit by some slight cue, so the medical examiner may detect that which has been concealed or unwittingly omitted in an applicant's preliminary statement, and thereby, perchance, save the company from a loss.

Hitherto, so far as ascertained, with one single exception, notwithstanding the acknowledged indispensability of competent medical aid, the medical department of life insurance has held only a position of secondary importance in the business. Common sense would seem to dictate that a business which depends for its success so directly upon a proper estimate of life's expectation in every instance, should have within its executive department medical skill equal, if not superior, to that in its actuarial or financial branches, and such as only special medical knowledge and training can afford. It may not be that every medical man is competent for the business; for as in every other business or profession, there needs to be some special adaptation of person and knowledge in order to diagnose, classify and adjust the integral parts that control life's probabilities.

The laws of inheritance, as it regards health and disease, long and short life, etc., need to be well understood, closely studied, compared and applied. The elements of longevity, as well as of vitality, must necessarily enter into such accounts, and all the forces and influences that control and affect life and health must be considered and well weighed in the problem of estimating the probable life expectation in any given instance.

Human life is subject to so many contingencies; its continuance depends upon so many factors, which only expert medical knowledge can determine, and which cannot be determined by actuarial science, that, so long as the business depends, as it largely does at the present day, upon such uncertainties as are actuarial estimates based upon general average mortality statistics, there need be no wonder that it cannot be conducted with permanent safety and success.

The application of special medical supervision is the only true safeguard. By it only can the estimation of the probable viability of individual risks be properly and safely given.

If all mankind indiscriminately could be insured, then might the calculation by average mortality risks be approximately correct, and assurance guaranteed by a company, even though with great inequity to the naturally long-lived; but as only a small proportion ever become insured, the risk is increased a thousand fold by this erroneous basis.

The success of this business has not been of that substantial character which it is possible to secure and to which it is entitled. The knowledge which advanced scientific investigation affords at the present day has been applied to life insurance only in small meas-

ure. Like a flock of sheep, the lead of the bell-wether has been persistently followed since life insurance became established, and the tinkle of "general averages" has been the only apparent sound to be followed.

Too much has been left to chance, and this fact has always heretofore made the cost of insurance excessive to the best grade risks.

It is universally acknowledged that first-grade life risks, like first-class fire or marine risks, are entitled to the lowest premiums, but how to adjust these premiums equitably, has heretofore been the unsolved problem.

It has been found impossible to solve it by relying upon the "expectation" tables deduced from "general average mortality" statistics; for the experience of every large company proves them to be erroneous.

It was no difficult process for mathematicians to arrange premium tables based upon "general average mortality" statistics; but when the mortuary statistics of life insurance began to exhibit the fallacy of this mode of computation, actuarial science commenced groping for a remedy; for as the accumulated poor and bad risks rapidly commenced falling into their graves, the lamentation of mourners at their losses was mingled with low muttered curses upon the heads of the unoffending medical examiners.

A scape-goat must be found upon which to load their sins of blind bell-wethering; and hence the great cry for better medical selection, a necessity for "re-organizing the medical branch."

Shrewd managers of the earlier companies did not fail to see that by the general average plan, natural instinct would induce inferior, impaired and short-lived risks to seek the benefits of insurance for family protection; while the superior, healthy and long-lived risks, even if they could be induced to insure at all, must be allured by other means than pure and simple life insurance; or they would soon lapse their policies rather than pay the usurious rates which companies were compelled to charge in order to make up for the rapidly accumulating losses of the inferior risks imposed by general averaging.

But this glaring fact could not long be concealed, hence a re-adjustment was determined upon, which, by a more critical selection, sought to exclude the impaired and poorer risks. Yet still more recent mortuary experience proclaims in thunder tones throughout the land that the adjustment is still inequitable, and the rates of premium erroneously computed, not in accordance with the natural variation of risks.

With all this groping, adjusting, and re-adjusting, the one great, most important fact has been ignored by all life companies with one exception.

There is a fundamental point which cannot be ignored, which should never be lost sight of, and which every observant mindwhen placed at the right focus—at once recognizes as the true foundation of all equitable life insurance, and that is—that all men of the same age have not the same rational expectation of life, neither have they an equal chance of dying, year by year, that the general average mortality tables would seem to show; that there is a natural selection and choice to be made among men of the same age; that some by a natural inheritance have a longer period of life than others, and notwithstanding temporary impairment will still continue to live beyond the average expectation of their age, while others, without any physical impairment, cannot, by any possibility, ever reach the average expectation period. This being a fact which must be admitted, and as all mankind will not and cannot be insured so as to make the general average plan tolerably safe, what other resource is left, unless these truths shall be accepted, and such methods sought as shall discover and adjust the premium rates to the various risks with equity and safety?

It is in view of these most important conditions that selection is to be made and the quality as well as the quantity (amount) of the risk to be estimated. To be able to mark out the distinctive lines of probable expectation, to judge of whatever impairment may have taken place, and adjust a corresponding premium rate, is in the highest sense the duty and prerogative of expert medical knowledge.

Next to the fundamental error of conducting this business upon the "general average plan" has been that of keeping its medical department in a subordinate position. That profession has not failed to recognize its true position, but the greed of speculation has so far succeeded in keeping it quiet. As a class medical men are not practical business managers; their life studies lead them to shun the more busy marts, to hold out the helping hand, to succor the weak, to protect the infirm, to sustain the depressed and desponding, and they are ever pushed to the wall when they come in contact with keen, sharp, unscrupulous speculation. But as he who lords it over his fellows in competitive business pursuits, or in the wild excitement of stock gambling, will certainly some day beseechingly call for his more humble and long suffering medical adviser for help from the effects of an overtaxed physical organization, so even now does the business of life insurance call upon its

best friend for aid and counsel in its trembling, threatened apoplectic condition.

That the medical department needs to be reorganized there is no question. But its reorganization will avail nothing comparatively so long as the present methods of computing premiums and insuring lives upon the "general average" plan is persisted in. There must be a radical change in this respect or no equitable premium rate can be fixed.

Life insurance, like every other business, must be conducted in equity, if it intends to be an honest business. Purely and simply it is a most beneficent institution, based not upon speculation nor chance; touching the hearts of men, it aggregates them together for the welfare of mankind; and for this reason, if for no other, its almost sacred character should induce greed and speculation to keep away their blood-stained hands; the higher moral attributes of man should alone be the custodian of the monies contributed for the future protection of the weak and dependent.

Every means should be diligently sought and applied in the conduct of the business that truth, honor, and equity demand, and when they are discovered and have been proved, 'twere worse than robbery to neglect their use.

As a sufficient number of years have now elapsed to establish the fact that certain prescribed methods, with careful application of scientific facts have not only proved the doctrine of "general averages" fallacious, but have demonstrated practically that the business can be prosecuted safely, equitably, and successfully;—would it not be well to inquire what these methods are?

In the first place, (as it may have already suggested itself, during the reading of this paper), in every well organized company there should be a responsible, specially prepared, medical superior, holding equal authority and responsibility with any other of the executive officers. Upon his and their judgment should the proper premium rate be fixed upon each individual applicant according as his own individual characteristics may indicate his life's expectation; his vitality and longevity, to wit: his viability.

But it may be asked, how is this single fact to be arrived at, as men differ so much in kind and quality? Certainly not by any general average of thousands upon thousands of the same age; but by a close analyzation of all the facts and factors that pertain to this individual. There is the ancestral record; by it may be judged the average mortality age of his individual kind. He has inherited certain life processes which fix a term to his existence; he cannot

live beyond them, he may shorten them. If he has done it, how and by what means? By dissipation, contracting incurable disease, overtasking his vital energies, dwelling in insalubrious districts, violating good sanitary laws, recklessness, useless exposure, or accident? Each or all of these elements of impairment must be weighed and judged as to their relative or combined influence in shortening the natural life term of the applicant under observation.

The preliminary step, then, should be to ascertain as far as it is possible from the ancestral family record of each person the ages of his living relatives, the ages of all who have died and of what diseases they died. This record should include the grand parents always, and as many of the Great Grandparents as any record can show. It is important also that these statistics should be clearly obtained on both paternal and maternal branches—such as uncles and aunts, brothers and sisters—giving their ages and conditions of health if living; if dead, age at death and cause of decease. So much of the details of the physical characteristics of each of those persons as it may be possible to get should also be recorded.

We have now presented before us a series of lives through which and with which this one has many characteristics in common; he is after, and one of, that kind. Whatever of life is inheritable is here shown, whatever of inheritable disease he may or will have, if there has been any, will almost certainly appear somewhere in this record; and if there has been none, have we not the fact almost indubitably established that in him there will be none; therefore there is very, very little risk in that direction.

The next question in order is, naturally, the special constitutional characteristics of the individual, whereby we may judge from which branch of the parental house he inherits his strongest viability peculiarities, etc. These, in detail, include height, weight, equipoise, and both a general and minute descriptive picture of his outer person.

Habits, Vocation, Residence, Intelligence, past and present Health, and other incidental facts, such as army exposure, various residences that he may have had and their local diseases, injuries whether permanent or trivial, &c., the details of which for want of time are here omitted.

To all these details which fully illustrate to a critical eye the life picture, as well as the inherent tendencies, are added a general description of the person, giving his biometrical measures of the head, trunk, limbs, all of which form a complete record of the party. One accustomed to the analysis and synthesis of these elements of viability can readily form a very accurate judgment as to the probability of any person's life expectation.

In view of these considerations, no right minded and true man can dispute the fact, which his own intuition teaches him, that he has within himself potentialities, governed by certain fixed laws, which give a period to his existence;—that in some it is naturally shorter and in others naturally longer than the general average of all mankind. True, this vital principle governing his longevity may be so interfered with as to deprive him of its full influence, or the accidents of life may suddenly cut it short. The laws of longevity being fixed, it is not a difficult matter, by the proper application of those laws, to estimate very closely the probable natural life expectation of any individual.

The facts to which we here refer show that there is something behind and beyond the present physical condition which governs and regulates the viability, and which must be sought for in other directions than by listening to the heart and lungs, feeling the pulse, taking the measurements of the height, ascertaining the weight of the body, etc. Men have inherited vitalities, and diseases which are constitutional; have habits which effect, vocations which modify, residences which promote or destroy health; they may be robust or feeble; they have idiosyncrasies inherited or not, instincts and intuitions, all of which are indicated by signs and manifestations hung out upon the outer wall for our reading.

The further problem then becomes reduced to the amount of impairment that may have supervened upon the proposed life, the effect of habits, or the accidental danger to which it may be subjected.

It is the perfection of detail following the true principles of life-governing circumstances, that alone can produce signal success in this business. It is the application of the principles of biometry with reference to natural longevity, and of those of medical science with reference to unnatural impairments, and of the experience of statistical facts to life's accidents, by the medical expert, that constitutes the working plan of all true life insurance, in the estimation of risks.

The following practical illustrations will perhaps more clearly exhibit the true value and status of expert medical supervision, in estimating the probable life expectation, by which to fix a premium rate in any given ease submitted for insurance.

In order not to confuse the mind with details, it will be perhaps sufficient that two extremes, exhibiting types of the best and the poorest cases insurable in ordinary average premium companies, should be used. Between these there exist every grade whose premium rate needs to be adjusted in accordance with the expectation of the person, and which cannot—in justice either to the company, its policyholders, or the applicant,—be adjusted by any general average table.

"Like begets like," and to calculate that the longevity of a class of men will be greater than the average of its ancestors is erroneous and unsafe. Persons descended from short-lived ancestry cannot beget long-lived children, and persons descended from long-lived healthy ancestors are unquestionably entitled to the benefits of this ancestral inheritance which—if not impaired by disease, physical defect, or excesses—most assuredly should place them in the superior grades, and entitle them to the lowest premiums.

### F. D. S.—Age 33—Married.

Ancestral record:

Paternal—Grandfather died at 90, old age.

Grandmother died at 92, old age.

Maternal—Grandfather died at 85, old age.
Grandmother died at 80, old age.

Father living at 73. Mother living at 70.

Paternal—Uncles, 3, all living aged 62 to 70.

Aunts, 1, dead; age, don't know.

Maternal—Uncles, 3, living, aged 60 to 70. Aunts, 2, living, aged 60 to 66.

Brothers—none. Sisters—4 living, aged 33 to 40.

American. White. Good proportions. Compact.

Height, 5 ft. 9 in. Weight, 175 lbs.

Head, large, measures 53 in. through temporal fossæ; 5 in. from Nasofrontal articulation to orifice of ear.

Nose, large, long, expanded nostrils.

Lips, long, red.

Trunk, large, long, measures 25 in.

Shoulders, square.

Chest, expansion 3 in., well developed, round, long.

Abdomen, medium round; girth, 35 in. Hips, broad. Back, straight.

Limbs, medium size; muscles, hard. Hair, brown, abundant, coarse. Beard, lighter, coarser. Eyes, hazel, straight. Complexion, dark, clear.

Features, large, regular.

Lyes, nazel, straight. Complexion, dark, clear.

Teeth, sound.

Neck, medium.

Has had diseases incident to childhood only. Vaccinated well.

Vocation, Farmer. Born and always lived in Maine.

Habits, correct and temperate, and always been so; never drank any distilled or fermented liquors; is a free liver; bathe weekly; give attention to ventilation, especially of sleeping room; rise and retire regularly, early; meals, regular; use tea and coffee; never use to-bacco in any form.

Health is now perfect.

Again, J. A. A.—Age 21—Unmarried.

Presenting nearly the same personal characteristics as F. D. S., except Height 5 ft. 10½ in., Weight 163 lbs., having same head measurements, length and size of trunk, and in perfect health, gives the following

Ancestral record:

Great Grandparents were all of them over 90 years of age at death.

Paternal—Grandfather living now, aged 70.

Grandmother living now, aged 70.

Maternal—Grandfather living now, aged 74.
Grandmother living now, aged 74.

Father living, age 47.

Mother living, age 47.

No Uncles or Aunts on Paternal side.

Maternal—Uncles 6, all living, ages from 25 to 47.

Aunts, 1 living, age 38.

Brothers—2, aged 12, 21.

Sisters-1, aged 23.

In this case it may be observed there has not been a death in the three generations since the Great Great Grandparents, all of whom were over 90 years of age at death; and in the first instance given it will also be noted that there was but one death since the grandparents, none of whom died under 80 years of age.

In view of such records is it not a violation of common sense, and all sense of justice, to charge a premium to either one of these parties upon the basis of the average duration of all human life? viz., at their actual age. Are they not entitled to a rebate on account of superior Longevity, Habits, Physique, Health? Most unquestionably. We will now present another illustration.

## F. E. P.—Age 24—Married.

Ancestral record ·

Paternal—Grandfather died 83, gravel.

Grandmother died 50, tumor.

Maternal—Grandfather living, 73, health good.

Grandmother living, 70, health good.

Father living, 52. Mother living, 48. Paternal—Uncles, 4 living, 38 to 65; 2 dead, 3, 55.

Aunts, 1 living, 40; 4 dead, 28 to 60.

Maternal—Uncles, 3 living, 35 to 40; 1 dead, 20, fits.

Aunts, 3, living, 28 to 40.

Brothers—4 living, 11 to 19. Sisters—1 living, 9; 1 dead, 11, dropsy.

American. Height, 5 ft. 6 in. Weight, 134 lbs.

Head measures  $5\frac{1}{8}$  in.,  $4\frac{3}{8}$  in. Nose, medium. Lips, long, red.

Trunk, medium long, measures 24 in. Shoulders, square.

Chest, well developed, expansion 3 in.

Abdomen, medium round; girth, 32 in. Hips, medium. Back, straight. Limbs, medium; muscles, hard. Hair, brown, curly.

Beard, lighter, finer. Eyes, hazel, straight. Complexion, dark, clear. Features, medium, regular, Teeth, sound.

Has had other diseases besides those of childhood. Vaccinated well.

Vocation, meat market. Born in Maine, always lived there.

Habits, correct and temperate; use ale, have been intoxicated seldom. two years ago; attend to ventilation of sleeping room; rise and retire early; active; use tea and coffee, weak; no tobacco in any form.

Health, good; had some rush of blood to head years ago, none for three years; some kinds of food produce inconvenience, fresh fish; have piles, bilious colic once or twice a year; have chronic Rheumatism at times; otherwise in good health.

We have here an example of fair ancestry, but with some constitutional impairment which crops out in his statements with regard to his own condition of health. In the account as posted up against him we find questionable points against Ancestry, Constitution, Habits, Vocation, Health. These indicate the impairments natural and acquired, and all without a medical examination.

Is it necessary to go farther? cannot a medical or even a nonmedical supervision decide with pretty accurate judgment that the risk in this case is almost dollar for dollar?

Other, though dissimilar cases, showing specially the tendency of ancestral inheritance:

# E. C. G.-Age 34-Married.

Ancestral record:

Paternal-Grandfather died 80, old age.

Grandmother died 43, stoppage.

Maternal—Grandfather died 50, consumption.

Grandmother died, don't know age or cause.

Father living, 65, in good health. Mother dead, 45, stoppage.

Paternal—Uncles, 4, living, 41 to 63. Aunts, 2, living, 60 and 30. Maternal—Uncles, 1 living, 55; 3 dead, 38—at sea, 50—consumption, 60

-don't know cause.

Aunts, 1 living, 55; 2 dead, 45—consump., 35—result of a cold. Brothers-2 living, 38; 2 dead, 14-hip disease, 6 months-don't know. Sisters—1 dead, 21—consumption; 6 living, 28 to 50.

American. Height, 5 ft. 111 in. Weight, 175 lbs.

Head, measures 53, 5. Nose, medium. Lips, middling long, thick, red. Trunk, medium long, measures 243. Shoulders, sloping.

Chest, medium; expansion 3 in. Abdomen, medium broad; girth, 351. Hips, medium. Back, straight. Hair, Saxon, light, middling fine.

Beard, darker. Eyes, light blue, straight. Complexion, fair, clear.

Features, medium, regular. Teeth, sound.

Has had fever and ague. Served in army 4 y'rs. Vocation, brick maker. Habits, correct and temp'te; use tea and coffee; smoke. Health, good.

### W. W. R.—age 25—Married.

Ancestral Record:

Paternal—Grandfather died at 70, don't know cause. Grandmother died at 70, don't know cause.

Maternal—Grandfather died at 80, old age. Grandmother died at 40, consumption.

Father died at 58, liver complaint. Mother living at 60.

Paternal—Uncles, 4 living, aged 50 to 60; 2 dead, 60—liver complaint, 60—don't know cause. Aunts, none.

Maternal-Uncles, 1 dead, aged 45, fatty degeneration of heart.

Aunts, 1 living, aged 70; 3 dead, consumption, aged 30 each. Brothers—3 living, 24 to 40. Sisters—2 living, 24, 30; 1 dead, (infant).

American. Height, 5 feet 8 inches. Weight, 140 lbs.

Head measures 5½ in., 4¾ in. Nose, medium. Lips, short, red.

Teeth, good. Trunk, long,  $25\frac{1}{2}$  in.; measures  $37\frac{1}{2}$  in.; expan.  $3\frac{1}{2}$  in.

Chest, well developed, broad. Abdomen, 32 in. Back, straight.

Muscles, hard. Fingers, well webbed. Foot, arched.

Nails, slightly incurvated. Hair, brown, fine, abundant, Beard, lighter. Eyes, light blue. Complexion, fair. Diseases, incidental to childhood only. Habits, correct, temperate, use no spirits nor tobacco.

Vocation, manufacturer of furniture. Born, and always lived, in Maine. Insured in two life companies.

Remark by Medical Examiner:—This man has a splendid chest development, and no present indication of pulmonary diathesis.

These two instances exhibit so great a tendency to inheritable or transmissible disease, as appears from the ancestral record, that it would be entirely unsafe for any company to insure them at actual age, and therefore they should be charged a premium in accordance with the unusual risk as estimated by the probably short expectation of life in each case. Yet one of them says he is insured in two life companies. Good for him, but bad for the companies.

It must not be understood that the ancestral record by itself is to be considered as the essential element in estimating a person's life expectation. It simply exhibits the potential inheritable vitality. It may or may not have descended to the proponent. But it is one of the factors by which the individual constitutional characteristics are to be elucidated in the further study of the personal characteristics of the individual's constitution.

The complete study of an individual's viability, or probable length of life, requires a farther consideration.

Whether he has really inherited those constitutional characteristics inferable from his ancestry; whether, if possessed naturally, they have been continued, and whether they probably will be continued in him or not.

To judge of these facts requires a complete knowledge of his personal peculiarities, his habits, vocation, residence, intelligence, instincts, past and present health, all of which must be particularly described to form a complete basis for a proper estimation of his own personal longevity.

If proof is wanted of the practicability and successful application of these *a priori* principles, it is found in the uniform experience during the past eight to nine years of our company, and which has been published in detail in the official annual reports.

The number of death claims paid from Oct. 1, 1873, to Oct. 1, 1874, was 12; being at the rate of 3.56 per thousand policies. This is slightly less than the death ratio (3.70) for the calendar year 1873.

As indicated and prognosticated in my report to you at the Quarterly meeting, in April last, in the following language:

"I have now to add that the 'results' shown in my report in January have been continuous. During the past six months from Oct. 1st to April 1st inclusive, but five losses have occurred among all our policyholders numbering over 3,000.—

"Should this proportion continue to the end of the mortuary year (Sept.) we shall number one less than for the previous year, which was eleven, and two less than for the year 1872, which was twelve."—

This has been remarkably verified, as the proportion of losses for this year is less than those of last year, the *number* of policyholders having considerably increased.

This death ratio for the year ending Oct. 1, inst., is but another year's corroboration of the true methods of grading and rating risks as practiced by this Company from its commencement; and shows conclusively the true function of intelligent Medical Supervision on the basis of Biometrical science.

The following article has just come to my notice:

"Mortuary Statistics of the Mutual Life, by the Medical Director, Dr. Isaac L. Kip," in which the following extracts appear:

"During a period of ten years, from 1858 to 1868, the total number of deaths from all causes was 1,448, of which 114 were under 25 years of age, 508 between 25 and 35, 615 between 35 and 50, 162 between 50 and 60, and 19 over 60. The deaths from consumption represented a total of 265, or a little over 18 per cent.; 39 of the number were under 25 years of age, 135 were between 25 and 35, 80 between 35 and 50, 10 between 50 and 60, and 1 over 60. It will thus be seen that more than half of the deaths from consumption occurred between the ages of 25 and 35, whereas nearly

two-thirds of the deaths from other causes (705 out of 1,183) occurred after the 35th year.

"Continuing the investigation among the deaths from consumption, we find that in 60 instances—nearly 23 per cent.—the disease appears to have been hereditary, as ascertained by the data given in the original applications for policies.\* In one instance both parents and a brother had died of consumption; in another, both parents; in ten instances, a parent and a brother or sister; in twenty instances, a parent; in eighteen instances, a brother or sister; in nine instances, two or more brothers or sisters; in one instance, two aunts. Of the remaining 205 cases, 6 had previously had 'spitting of blood;' 4, 'bronchitis;' 2, 'slight cough;' 1, 'asthma;' 1, 'pneumonia;" 1, 'chronic diarrhœa.'

"The deaths from 'apoplexy' and 'paralysis' numbered in all 195, or nearly 13 per cent. of the deaths from all causes. 8 were under 25 years of age, 49 between 25 and 35, 100 between 35 and 50, 33 between 50 and 60, and 5 over 60. The only evidence of anything like an hereditary character in the disease lay in the fact that the same or allied diseases had carried off one or more members of the family in sixteen cases, (over 8 per cent.)"

It may be observed just here, that no better illustration could be afforded than the fact that a want of proper medical supervision has resulted so disastrously in the enormous losses to the Mutual Company by hereditary and constitutional diseases. The remark that "the only evidence of any thing like an hereditary character in the disease lay in the fact that the same or allied diseases had carried off one or more members of the family in 16 cases, (over 8 per cent.)" shows most conclusively the absence of proper Medical Supervision.

The very circumstance which the writer expresses by the word "only" is one of the most important elements for careful observation and study for the protection of Life Insurance Companies in estimating any risk, or in judging of the probable chances of any person's life expectation.

The dangers of hereditary or constitutional diseases are very seldom discoverable by any Medical examination; but must be sought for in the antecedents of any given case.

The facts, so easily discoverable, under the circumstances "only" are those by observing which, the Medical supervision of the American Popular succeeds by its methods in avoiding such useless losses.

<sup>\*</sup> The italics are ours.

In the foregoing I have considered only those conditions antecedent to and independent of the medical examination proper. This examination presents, when carefully filled out upon a proper blank, an almost complete medical and physiological history of the applicant; it also affords an independent statement of facts, with which the interested statements of the applicant may be compared, and any error, intentional misrepresentation or falsification at once detected.

This blank may be filled up by any respectable physician, and, when considered in connection with all other information afforded by the applicant, and by his family physician's and friend's certificates properly filled out, places in the hands of the chief medical officer such a combination of facts in regard to the party's life history, his antecedent inheritances respecting longevity and disease, etc., as afford an almost unerring basis upon which to form a judgment as to the true character of the proposed risk.

What I wish to explain more particularly is that the applicant's blank, carefully filled out in proper form, is quite as necessary, and, in fact, even more useful, than the Medical Examiner's blank filled out by him.

They are both pre-requisite to a perfect understanding of an applicant's viability, and the proper rating of the risk; but it is in the Applicant's blank, rather than the Medical as usually found, that the greatest improvement is needed.

Indeed the present Medical blank of most of the companies would do very well for its purpose, but the Applicant's blank, as we usually see it, is very deficient in many important particulars.

The Medical blank should be intended as only correlative to the Applicant's blank, as indeed it must be. It can afford only such additional "expert" knowledge of facts and conditions as an applicant might overlook or be ignorant of, in regard to his physical or pathological characteristics.

The chief prognostics of the viability of the healthy person must be found and can be found only in his own part of this application. The description of his ancestry and of himself to a great extent can only be furnished by him if it reaches the company through the Medical blank; it is a repetition of some of the facts in his blank for the purpose of comparison at the home office, while it should be fully and in every possible way impressed upon the applicant that he must be honest in his statements and replies, and in good faith answer all the questions put.

It is found in practical experience that the Medical blank is cor-

rected by the suggestions of the Applicant's blank quite as often, nay oftener, than the latter is corrected by any information gained from the former. It is also found better, as a rule, to have all that can be stated by the applicant put down by him on his blank, thus fixing the responsibility for good faith upon him as far as possible; and this also saves the time of the Medical Examiner. Indeed, if the Applicant's blank is properly drawn and filled out, giving all the details that the applicant can give about himself, it is seldom that anything can be added by the Medical Examiner in that respect.

The Medical Examiner, in the case of most persons, must be considered in the light of a detective, concerning the truth or falsehood, good faith or deception, of the applicant, rather than as an original source of any useful information bearing upon the viability of the person.

When we have the Biometrical measures of the applicant upon one page of his application, his ancestral record upon the second, and the points in regard to his Constitution, Habits, Vocation, Residence, Intelligence, Instincts, and Health, as given by himself, upon the third page, we find practically that it makes little difference which one of the three we take as a guide; and although there is an advantage always in looking through them all, a risk being often times hinted on one which is not found on the other two, yet as a rule it is remarkable how nearly they agree in their teachings, often affording an entirely correct judgment upon one page alone.

It is the medical expert (and he should be literally an expert in this matter of estimating viabilities by their signs and indications) who alone is competent to prepare and make up these blanks, and to supervise their rating when filled. A rating must be intelligently made in accordance with the characteristics of the individual, and not upon any uncertain assumption of actuaries, however mathematically demonstrated, since in that case the life of a company will demonstrate that figures do not always tell the truth.

We may present this matter in brief thus:

Correct Philosophy of Life versus, { Incorrect Philosophy of Life Insurance.

Individual rating, versus, General average rating.

Medical supervision and judgment based upon the facts in each case.

Versus, { Actuarial assumption based upon fatal errors, increasing with numbers.

Absolute knowledge of the entire viability of a company's risks, and, of course, of its security,

| The entire ignorance of the aggregate viability in a company, and, of course, of its security.

This plainly shows the importance of the Medical function in the Home Office of a Life Insurance Company, that it is not secondary, but that it is the prime element of security, as well as of equity and economy, and that the careful, intelligent medical prognosis of proposed risks, and their equitable rating, is the foundation of successful business.

It has been said, and sometimes with a sneer, that the Company with which I have the honor to be associated is "a doctors' Company," meaning that it is managed by doctors.

For one I am proud of the epithet. It is an omen, a promise of success; and the results of its methods and medical supervision have already created astonishment in the insurance world, and also in the world of science and practical life; it is an omen in a broad, grand, and high sense; it indicates that the Company will prove the means of developing the true methods of Life Insurance to a degree still higher than has yet been done, although we are proud to believe that much has already been accomplished.

But I hope that we may be so far appreciated that you will believe that this pride is not selfishness, but that it is chiefly felt on account of the relations which our work may justly be said to have in promoting the great cause of humanity.

#### To our Directors and to the Public:

## CONFIRMATORY EVIDENCE

OF THE VALUE OF

#### MEDICAL SUPERVISION.

BY THE PRESIDENT, (T. S. LAMBERT, M.D.,)

OF THE

#### AMERICAN POPULAR LIFE INSURANCE COMPANY.

Since the Report of Dr. Moreau Morris, our Surgeon-in-Chief, was in type, our attention has been called to a document issued from the Home office of one of the oldest, the largest, and, with perhaps a single exception, the best of the old plan companies; the full board of Trustees being named upon one of its initial pages as sponsors for its contents.

We desire here to call attention only to one page of that very remarkable issue, and to make some illustrative remarks thereon, for three reasons.

First, It forms an excellent text for giving point to the Report of Dr. Morris, or it may be called an apt illustration of the truth of what he says.

Second, We have the right to constantly assert and illustrate the precedence of this company in taking the only proper course (not merely the only approximately proper course,) in the initial work of doing life insurance by the application of the principles of Biometry, which are not only the basis of all correct life insurance, but equally are the foundations of all vital science; upon which the correct theory and practice of medicine must be established—and not less may be said of every department of practical life,—and which, when understood, will entirely revolutionize theories and practices grown musty with age, as well as those of a more modern inception.

Third, We are in duty bound to make known the truth which is in us, and to shed light upon the insurance work of the world, according to the great energy which we attain by being indoctrinated with correct principles, and made to feel forceful and sure of their value, by the results of their application constantly under our observation.

That to which we wish to call attention reads as follows:

- "How to proceed in effecting insurance:
- 1. "It is necessary in order to decide upon risks offered \* \* that a statement of the applicant's physical condition, and his family record of health and longevity, should be placed on file in the office. \* \* A form will be furnished \* \*.
- 2. '' A medical examination by a physician appointed by the company is the next step  $\,^*\,$  \* who seeks to ascertain the past record and present state of health of the applicant  $\,$ \* \* .
- 3. "The certificate of the Medical examiner, together with the approval or disapproval of the President or Vice-president, closes the matter as far as the applicant is concerned."

#### Remarks-

Under such a method as this, necessarily, there will be many death losses upon those who should not be insured at the ordinary premium of the actual age.

Neither the President nor the Vice-president will be responsible for the admission of many risks certain—when insured—to prove a loss to the company, an unnecessary burden to the best risks insured at the same premiums; for neither of those officials are medical men, much less medical insurance experts, being merely laymen, good experts in judging of risks of loans upon estates, bonds, etc., but not judges of life probabilities.

The general medical examiners must not be held responsible in the present status of medical science and instruction, for not one doctor in a thousand is an expert in regard to all the indications of the probabilities of length of life; nor can even recognize them, much less measure them and the life potentialities to which they are related. This cannot be expected of even one in a thousand, and since it is not necessary, it should not be demanded.

The chief medical examiner in the home office of that company is a gentleman of marked ability, and a scholar in his profession, and, to a large degree at least, a medical insurance expert, yet he cannot be held responsible for the result of work in which, according to the quotation, he is not expected to have any hand. He does not appear to be as he ought to be, an essential factor in the ordinary insurance business of the Company.

The applicant cannot be held responsible, since he can only answer truthfully (if honest) such questions as the blank indicates.

Upon whom then must the responsibility of many of the unnecessary losses devolve?

Formally upon the trustees who permit such an organization and division of the labor and of the salaries as are found in that Company; or if it is thought that the present executive officials have no more salary than they should have, the company would make money by losses saved if it should increase the duties, the responsibility, and the salary of the home medical examiner to those of a medical supervisor, and made equal, if not superior to any other official.

But the trustees may with plausibility pass down the responsibility in this mutual company to the insured who (or whose proxies!) elected the trustees, since these, doubtless, truly represent their constituents, expecting such an organization as they have, especially as most of those constituents went into the company after it was organized.

Indeed, how could anything better be expected when ignorance of life insurance principles, and actuarial mysticism and assumptions in place of science was universal previous to the establishment of the American Popular and to the enunciation of the principles of Biometry (the science and art of measuring the probable length of any person's life,) as the correct basis of life insurance, as well as of whatsoever else is related to life.

The grand weakness of the old plan of doing life insurance business as pointed out so clearly by our Surgeon-in-chief, in his report, is remarkably illustrated by the extract above quoted.

Suppose that doctors who were remarkable for their skill and medical ability should be appointed to the work of valuing property and locating funds, would there not be many unnecessary losses? What else can be expected if lawyers and general business men manage the business of life insurance, which is essentially a department of applied physiology and pathology.

That the view which this company takes, and which its "experience" and the Report of Dr. Morris so clearly sustain, is correct, is conclusively proved by an extract from another document from the home-office senior medical examiner of that company, quoted by Dr. Morris—"Among the deaths from consumption we find that in 60 cases—nearly 23 per cent.—the disease appears to have been hereditary, as ascertained by the data given in the original application for policies."

This does not prove want of scientific skill, nor of conscience in the numerous examiners who "passed" those cases; nor that the executive officials were remiss; nor that all those applicants were dishonest; but it

does prove that a medical expert in the home office of that company can now, and could when the risks were insured, determine that they were hazardous from the "data furnished by the applicants," even in such comparatively barren blanks as those used by that company.

This also proves that such a degree of expertness is not essential in the general examiner; it is needed only by the home medical examiner, made Medical Supervisor, or Surgeon-in-Chief, as our Directors have chosen to designate that official, who stands equal in rank, in emoluments, and in authority, and consequently of responsibility to any other one of the Executive Board.

We also wish to suggest that although the extract above quoted does not point directly, it does indirectly to the fact that Dr. Morris has proved: that the "Medical expert" is the proper expert to cast the questions and blanks in regard to the data essential to insurability, as well as to deduce from them—when filled—the measure of life indicated.

Upon these two points we would fix earnest attention; they are the sheet anchors of correct life insurance.

The "medical insurance expert" must be held responsible for framing all the Biometrical questions of all the blanks; also responsible for the judgment upon the meaning, latent and active, of the answers, and that there may be the fewest errors, a double, or even triple, conning of these answers, and of the deductions by two or three well qualified persons, two medical and one layman is advisable; then may the medical home expert department be justly held responsible for all unnecessary death losses, not being excused by any actuarial general average assumption, but held for not prevising them by a judgment based upon the facts of the lives, their nature, inheritances, liabilities, etc., as to be found in each case when insured.

We deem these ideas so fully determined as true, and of such very grave importance as well as interest to all concerned in life insurance, either as makers or takers,—and noticing that many insurers seem to be honestly desirous of improving their business by diminishing the death losses, yet, not understanding the true philosophy, are looking the wrong way for their salvation,—we shall be excused for taking the opportunity urged upon us by the two extracts quoted to prove by undeniable facts and logical deductions the validity and great value of the positions taken by this company, with the hope that many will be induced to inquire into them fully by reading the documents in which they are fully exhibited.

A little knowledge of the facts will relieve us of any imputation of

wishing to give an adulatory puff to our own company by making invidious comparisons, and of arrogantly making a profession of benevolence toward other companies.

We are pecuniarily interested in having the business of life insurance conducted rightly, both so that the companies shall not fail and disappoint the insured, nor succeed by such inequities as will disgust them.

If the companies do not understand how to select the grades of risks, such as they desire to insure, they will disaffect by the great inequity of insuring very dissimilar risks at the same premiums, while this will also certainly soon bring failure. Both these facts bring discredit upon the entire business, even involving this company, although so different from others in these respects that it ought to escape the odium.

It also results to our Company in this wise at present. We hold that quite various grades are perfectly insurable, but at equally variable premiums; and although we prefer the best grades as affording by their better lives, better sustained policies, we are willing and desirous to insure the other insurable grades at an adequate premium. This we cannot often do now, for there is a large number of applicants who, if we charge what it is really worth to insure them, put their thumbs to their noses and say "we will go where it does not cost more to insure us than it does to insure any one at our ages; we guess those companies will live longer than we shall." We thus lose our labor, while those who insure them at ordinary rates lose their labor and a great deal of money besides, which equitably belongs to the better grades. Mark that we do not here refer to those who are unsound or very poor sound risks, nor to any who are rejected by the average plan companies, but we refer to those which any of them do take, although at least somewhat below the average, and we also refer in particular to those "pretty good cases" which though not below the average are not up to the best grades, and which may properly be insured at not very much increased premiums.

If any of the companies wish to insure—as some of them say they do—only the best risks, it is for our interest to show them how to accomplish that which they wish to do. If any companies willingly insure inferior risks at the ordinary table rates, thinking that each one counts as so much more business, and hoping that there will be insured a sufficient number of superior risks to make good the losses by the inferior, it is our interest to show them that an increase of business that does not cover its cost is the worst form of a losing business, and one which no company can afford to do.

That many inferior risks are daily insured either because their inferiority is not understood, or because they are foolishly thought to swell business, we have daily occasion to notice, as Dr. Moreau Morris has truthfully said—

For we have occasion to rate many at a high premium who state in their application that they are already insured; others, thus rated, not elsewhere insured, go straightway and get insured elsewhere.

We also have the opportunity of observing that the cases brought or sent to us by the agents of other companies as rejected by them are so desperately inferior that it would appear the extreme of folly in any agent to expend a moment's time over them. We never have any such presented to us that we should not place at a higher premium than any in our fourth class, which marks a higher premium than any one will pay. As we do not have any such candidates who will rank in our second or third classes, we conclude that risks corresponding to the grades of our second and third—and even fourth—classes, have no trouble in being insured at ordinary rates in other companies. We are also persuaded of this because the ratio of deaths in the other companies averages, in the aggregate, the ratio in our third and fourth classes united.

For example, we find this year that the death loss ratio to our whole number of policies, including all our grades, is but 3.6 deaths per thousand, while in our six best grades, grouped to produce our best class, the deaths have not equaled one (1) death per thousand. These grades, as we have shown include most ( $\frac{2}{3}$ ) of our insured, and when the deaths in the remainder are ratioed, the ratio is nearly as large as those of the average of the companies:—our aggregate of losses ought to be and would be as large as the average in other companies, if we insured as many in our inferior sound classes as we do in our first and second; this would not be contrary to, but in accordance with, our correct principles, since each of the grades would be insured at a correlative premium—which, when large, as we have said, we cannot now often obtain, such applicants turning from our just premiums to seek those which are unjust because too small for their risks; so that this company has to be content with doing business almost exclusively with the very best grades.

This is expensive to the other companies and not fair to this, and if any of them complain that our insured do not die as fast as the tables require, it is their fault, not ours.

We wish, therefore, to decidedly correct one erroneous impression that most agents unacquainted with us have. They apparently think that be-

cause we offer to insure any one, we have such a hankering after business that we jump at the chance of insuring the cast-offs of other companies at a premium insignificant compared with the real cost. Such agents come but once on such an errand, going away with the idea that if they have any extra good cases, our company is just the place for them, but if the cases are at all inferior to, or even merely at an average grade, any other company will bite at the bait quicker than the American Popular. It has no desire to do any business that is likely not to pay, and has simple but efficient methods, almost infallible, of measuring the correct equivalent premium for any life risk, to which it always adds a little margin for a profit.

Its delight is to find applicants with the best of Ancestry, Constitutions, Habits, Vocation, Residence, Intelligence, Instincts, Health, and Age, who wish to look into the matter, make sure they are right, then go ahead. To such best grades it can afford premiums so low that they can well afford to take out policies fully protecting their families, and giving to themselves entire freedom from anxiety of mind on account of any financial effect upon their families in case of their own decease.

This also produces security, doubly secure, since this company makes to all other grades a premium entirely adequate to the probable cost of each, according to the individual character of each risk indicated by the reliable scientific application of the principles of Biometry.

This application, made through the instrumentality of correct medical supervision as distinguished by Dr. Morris from the old and yet common method of "medical selection" enables this company to present for patronage, with entire security, the economical and equitable form of

TERM-LIFE (Labor-Term) INSURANCE, '' NATURAL PREMIUMS."

Some of the leading companies of the old plan, indeed the "oldest and largest" of them all, as some of its exponents are in the habit of saying, assert that it cannot afford to transact this best of all forms of policies, since it found that level term premiums did not cover the cost of term policies, a larger proportion of those who desired such policies dying than in case of those who chose whole life policies. Such has not been the experience of this company, which has a smaller proportion of losses among its term-life insurers than among others. It is not the custom of this company's medical supervision to grant policies merely according to the selection of the applicant, or rather it is its custom to make the premium, among other things, according to the reason of his desire—and to find out that reason is one important point, and not only

the reason but, if that is wanting, the instinct that induces the desire;—perchance it is excited in that way. In other words, as our medical supervision deals in life properties and probabilities, it is its business to understand its business, and to be able to judge correctly of what it is doing, or to let it alone; in the same manner as a lawyer who proposes to advise in the transfers of estates should be posted in all that pertains to that branch, or he will cause the losing of money to his clients and of reputation to himself.

This point, to wit, of being able to do a safe

TERM-LIFE (Labor-Term) INSURANCE BUSINESS, "NATURAL PREMIUMS,"

is a matter of great importance to the probably long-lived and stronglived; since it enables this company to offer to them insurance fully protecting their families, at a remarkably small figure, during the entire period in the course of which their decease will be likely to financially embarrass their families.

In our best grades the deaths have been less than one (1) per year per thousand policies for nine years! The average death losses in all the other companies last year was twelve (12). That makes the death cost, or net premium, in other companies, twelve times as much as it is in the best grades in the AMERICAN POPULAR LIFE. And this state of things has continued for nine years! since our origin; growing worse in all other companies from year to year, but rather improving than retrograding in the best grades of this company.

That is, the death cost to the best grades in the American Popular upon twelve thousand dollars (\$12,000) is not so much as it is upon one thousand (\$1,000) in the other companies averaged!—or the American Popular can afford to make for its best grades an assurance for one hundred and twenty thousand dollars (\$120,000)—at a net premium lower than the other companies can average for only ten thousand dollars (\$10,000) assurance.

Is not this plain enough proof of the value of medical supervision to the probably long-lived, to wit, the best grades?

Our practical gross premiums do not of course show so large a difference in our favor, yet they are so striking as to quite captivate the best grade risks.

But we must not overlook another very great advantage of "medical supervision."

If properly transacted, it relieves the medical examiner of much very embarrassing responsibility, which he should not have. He is not usually qualified, nor need he be, to "pass" an applicant as insurable; this depends upon premiums paid as well as upon physical condition. He should not have the "applicant's statement" to the company before him, either to bias him or to incline him—certainly not to allow him to make his own account tally with the other. His examination and report should be independent, and not seen nor known by any one except himself and the medical supervisor or Surgeon-in-Chief at the home office.

Some physicians will not examine for insurance lest they offend the applicant. Many have found that they offended agents who knew their skill and candor. All this unpleasantness is avoided by proper supervision. Then the examiner is only asked for facts, and not for his opinions.

But it is equally important that all temptation to collusion with an applicant, or with an agent, should be avoided. Most of both are honest, but many of the former, and some of the latter, are not, and some others who intend to be so in a general way, have a lax view of things when an insurance company is on one side and their own interests, as they think, on the other. It is a fact that many persons of a very fair character, as the world thinks, will try to get insured upon a different basis from that of the truth, and there is here and there a physician who is just as willing to help, if he thinks it will pay, as he is to allow a man to die rather than confess ignorance and have another doctor called.

A large majority of medical men are honest, a large majority of agents are honest, and a large majority of applicants are honest,—yet the several insurance companies of New York City pay out more than a millon of dollars each year on account of the dishonesty of each of these classes,—not less than three millions per year taken out of honest insurers by dishonest ones,—much of which could readily be saved when the claim is made, were it not that the companies are afraid that the honest insured will be alarmed if such a searching inquest into cases is made as the extent of the evil demands. The companies are beginning to change their minds upon this matter. It is high time; the loss to the honest is immense by the tricks and deceptions of the dishonest among agents, examiners, and policy applicants.

The Reports show that over thirteen millions of dollars were paid by the New York companies for death loss claims last year. Now one official of one company says that in his judgment two-fifths at least, and perhaps three-fifths, of the losses paid by his company were upon risks which should never have been insured, and two-fifths at least were absolutely frauds. He is a fair man, and his opinion, without doubt, is correct; and it is also a fair view of the aggregate payment of the companies.

By that standard more than five millions have been wrongly paid out—an enormous amount. Indeed it would appear that as the matter has been managed the sacred institution of life insurance has been a grand encouragement of frauds—inducing them by offering easy methods of making them and then aiding in covering them, and rewarding them by paying frauds without contesting them. An agent takes an application, he selects an examiner, shows him what is said upon applicant's blank, aids in making medical examination, receives premiums, notifies the company of the death, receives blank proofs of loss, kindly aids in filling them—especially the medical one, which perchance is by the same doctor who examined the party for insurance,—receives the assurance from the company, pays it to the widow with her thanks and a testimonial to the promptness of the company and to the sympathizing kindness of the agent. Is this right? Will it not encourage fraud? Could anything be devised better adapted to the purpose if the object was to encourage frauds?

It is at least advisable, as all must admit, to prevent, as far as possible, the dishonest from obtaining admission to a company. "Medical Supervision," in the sense meant by Dr. Morris, is admirably adapted to accomplish this object. Let us then have it by all means, and save some of the millions now so deleteriously permitted to be fraudulently obtained, and what is of equal if not greater importance, prevent the discredit, to the great cause, which is now inflicted upon it, and on account of which this company suffers in common with those through which the disgrace has been brought.

## REMARKS BY W. H. DWINELLE, M. D.,

(ONE OF THE DIRECTORS.)

Following the Report of Dr. Moreau Morris, at the quarterly meeting of the Board of Directors, Oct. 28, 1874.

Dr. Dwinelle having just returned from Europe where he interested himself somewhat in insurance as there found, being called upon, made an able and interesting address supporting the views advanced by Dr. Morris, and giving at some length the results of his experience, especially in London. He spoke as follows:

On presenting our distinctive ideas, I found that the plans of our company had already been noticed and that their astonishing results had bewildered those familiar only with the notions of insurance heretofore recognized. Many who were at first inclined to regard them as visionary, or even to treat them as absurd, were afterward eager for information, who, admitting and accepting the views expressed as good and incontrovertible doctrine, verified the adage that "Those who came to scoff remained to pray."

Some believed, or affected to believe, that our success was due to extraordinary gifts on the part of the founders and officers of the company. I explained to them the principles of Biometry. That God Almighty has written on each one's personal constitution the record and indications of his viability,—that these characteristics have been transmitted to them by a law that cannot be contravened, from an ancestry who have set their seal upon the coming generations,—that all these indications are so readily recognized through the teaching of Biometry that any one of fair education and common sense may, in a reasonable time, become a practical expert in everything that pertains to our peculiar system;—indeed that our present officers have such confidence in the progress of ideas that they believe those who succeed them will be superior to their predecessors.

The principle of life is the grand foundation of all things, the centre and source of all energy, and the laws of life properly understood enshrine all knowledge. This science and its application reaches out into every department of human activity, and the fundamental ideas which our company represents, and by which it is governed in its work, underlie all that is valuable in human affairs.

The science of Biometry is to revolutionize the whole system of medicine. This is the foundation. It will revolutionize commerce and all the industries of life. It will furnish new data for the solution of many scientific questions that now perplex and baffle the wisest. In the selection of a partner in business, attention to its revealings will prevent many a ship-wreck of fortune, by the wise selection of co-workers whose early efforts and promise will not be likely to be cut off by early death. In forming matrimonial alliances, an intelligent and conscientious regard to the law of transmission of inheritable tendencies, (nay certainties), for weal or woe, will cause many a man and woman to make blind sentiment and passion wait upon sober judgment, lest the pathway which they propose to tread may lead to consequences of inestimable sorrow, or taint their sanguinary "strain" forever.

(He also remarked at length upon interviews with a number of leading physicians, and detailed the surprise, and at length the admiration with which they listened to even a fragmentary presentation of these high

truths which it has been the prerogative and the good fortune of the American Popular to promulgate.)

I reminded them that the conventional "dose for a child or an adult" is administered irrespective of any consideration of the patient's traditions, or his inheritance of long or short life; and with most practitioners, the questions :- what are his legitimate forces, what his powers of resistance or endurance, what his biometrical tendencies, or what his ancestral record, and his reasonable life expectancy, never enters as an element into their considerations. That the long-lived and the short-lived are treated alike when affected by the same named disease—the strong man in the meridian of his life period and the short-lived at his inevitable final hour are treated to the same dose, both unnecessary, since one will surely live and the other will surely die. And the fact that the long-lived are comparatively exempt from a certain class of diseases, and are affected but slightly by others, that by their superior inherent forces they will resist all diseases—rise above them, and as a rule die of old age, is rarely ever taken into consideration in estimating what is or what is not necessary for the advantage of such patients.

The study of vital forces is the key to unlock nature's mysteries.

Referring to the two ideas of grading and of Term-Life, I found intelligent fire insurance underwriters, and some life managers opening their minds to give assent to the equity, security, and simplicity of the ideas we present in regard to grading lives, &c.

In reply to those who spoke flippantly of the danger that the science and its application would be as lost arts when the present skill that interprets and manages them has passed away, I showed that the simplicity of these principles was correlative to their truth, and that all analogy of human progress and scientific achievement went to show that others must come after us who shall extend and carry out to still more grand and farreaching results, these vital truths, that are yet, however perfect and valuable they may seem, but in the infancy of their development; I do not count that they have more than entered the road to their grand triumph.

[With a brilliant review and illustration of the law of classification and differentiation in nature, the analogy of the same principles in the determination and measure of human qualities was forcefully set forth.]

'[As the idea that our officers have some special art or skill which will die with them, mentioned by Dr. Dwinelle, has been made quite common in this country also, -invented and used by our so-called competitors as an objection to this company, --- we insert the following:--

#### COMPLIMENT

(From the Insurance World,)

#### TO THE PECULIARITIES OF THE

## AMERICAN POPULAR LIFE INSURANCE COMPANY.

#### SOUND LOGIC.

"The American Popular Life Insurance Co., through Dr. Lambert, its popular exponent, has issued an address upon the subject of insurance which contains much of real sound logic. It enters into a detail of the difference between its own plan of life insurance and that adopted by the companies, which it characterizes as the issue of 'one versus one hundred companies in respect to simplicity, objects, principles, methods, utilities, and consequent attendants.'

"Dr. Lambert unquestionably indulges in peculiar views in reference to life insurance, and although we are not prepared to say with him that all the world is wrong in this path of doctrine and that he is right, there is so much reason and good intention and ultimate benefit in his arguments, that we cannot refuse to see errors in the system of life insurance of which it might be purged, in relation to which we make the following extract upon the subject of medical examinations:

- "'While the 'old plan' companies are thinking to rely chiefly upon their 'medical examinations' and blaming their 'examiners' for their 'ill luck' (?), this company finds its chief reliance upon the 'preliminary' which is seldom affected by the after testimony of the friend's, family physician's, or medical examiners's certificates. We do not ask the 'examiner,' as they do, for his *opinion*, but for the facts in the case, so far as his blank goes. We compare the whole of the testimony. He cannot be expected to be an expert in judging of the viability of the party. He is an expert in regard to what we ask him, which is only a part of the whole. We are the experts in regard to the whole. The medical examinations of the 'old plan' companies against which they insinuate so much are truly the best part of their case, and save them many losses. Their 'medicals' are well enough usually, that is not the point; they need more than it is the true sphere of the 'medical expert'—in making physical explorations -to seek. They need all the facts of the person's history, and those of his ancestors, all his essential measures, and they need to know how to use these facts, not according to actuarial 'averages,' but according to their individual viability value.'
- "'In proof that our course is right, we proudly offer the mortality experience' of this company. The like has been unknown before in the history of the world, demonstrating the fundamental principles of the company to be true. Our company last year had less than four deaths per thousand insured, while the average of all the 'old plan' companies was nearly twelve deaths per thousand insured."

The Insurance World having had the good will to say the pleasant things quoted above about the American Popular and its President, attributing to him—as he thought—more than is his due, he addressed the following polite note to the Editor, with the intent of placing several matters in the right light.

#### EDITOR INSURANCE WORLD:

Dear Sir,—In your September number you took occasion to say some very kind words of Dr. Lambert, for which I very much thank you. It is not fair to others, however, for me to allow this occasion to pass without saying to you, and, with your permission, to your numerous (I hope) readers, that Dr. Lambert is not entitled to all the credit which you bestow upon him. The brains of others have been busy upon the same problems, and have helped to work them out. It will not be egotistic to allow that he has done more than any one person, but alone he could not have evolved what the work of all in the Company has been essential to performing.

As long as the matter was in the least doubtful, I was willing to be the only target of fools and fogies, but now that a splendid success has been achieved, I insist upon having the credit shared among those who, by the sweat of their brows, have earned it.

Each and every official (with one exception) ever connected with the Company is entitled to a vote of thanks from the public for the original ideas that he has given towards the development and demonstration of the great practical truths that this Company has been the means of presenting to the world.

The Directors also, one and all, and the Stockholders, should not be forgotten, for they gave faith not only to the enterprise when most were sceptical, but they proved their faith by their money, a solid and substantial evidence of their determination to sustain our effort to the bitter end, or to the glorious fruition which is now crowning our work.

Some have passed away from earth, and some others of them, after seeing us on the way, and watching over our welfare while we needed their influence, have given into other hands their labor of love which they enlisted to perform. But their names are engrossed deep down in the foundation of our enterprise, and they must forever share the honor which they helped to build.

In proof of this I have pleasure in sending to you the advanced sheets of the Report of Dr. Moreau Morris, our Surgeon-in-Chief, one of the most interesting documents ever produced for Insurance men to read.

You will notice with pleasant surprise that during the year past we have lost by death only three and six-tenths claims per thousand policies. That is one-tenth less deaths than ever before, since our second year, and as the claims correspond to the number of deaths, there will be a great decrease in the ratio published in the Reports, which last year charged us with seven claims upon two deaths.

You will please remember that these ratios in this case are upon all

of our grades collectively. In the "best grades" the ratio is very much less. Indeed in our "best six grades," which are grouped together to form our "best class," the death ratio has been less than one per thousand policies per year since our origin, eight years since, reducing the net or death cost to our "best grades" to a merely nominal sum; so that by using our "Term-Life" (labor-term) "Natural-Premiums" form of insurance, such "best risks" can afford to fully protect their families not otherwise protected in case of the death of their bread-winner—that is can afford to assure such an amount that in case of death before their families are otherwise protected, the interest of said amount shall yield to the family the same income that they enjoy from the labor of the insured.

It is no wonder that those who used to pooh-pooh Dr. Lambert, and the American Popular,—saying "It is not practical," "There is nothing in it,"—should now be saying "Well, there is something in it, we cannot tell what, exactly,—we wish we knew; but when Dr. Lambert is gone, and he cannot last forever, no one else can keep up the plan." These precise words were spoken by the leading official of one company, and are, to speak crudely, just so much bosh.

The principles and methods that we work are perfectly simple, and will be better worked when Dr. Lambert is dead and gone than during his life. It is a sure thing, and those who are hoping that he will soon die and leave them in peace to grow fat over their average plans, will be more disappointed than ever. There are those in the Company now who can work it better than he can; and he understands fully, and he wishes to have others understand, that he is retained in his place chiefly for the good that he has done, and certainly not because he is now an essential spoke in the wheel.

In proof of this I submit, that among our entrants during three years, all graded and rated by our present Surgeon-in-Chief, Dr. Moreau Morris, then entirely new to this specialty, only one has died, and from incidental disease, while, according to the "experience" of the best old plan companies, we were entitled to fifteen to twenty-five deaths; a saving to this company of thirty to fifty thousand dollars losses on these alone.

This fact, so surprising to those who do not understand the simplicity and reliability of the principles of Biometry and their application, demonstrates what I say, that in from three to six months study and practice under our methods of medical supervision, any well educated medical man, having a natural aptitude for this specialty, can become an expert in it. The great losses of the companies generally are, therefore, unnecessary, and inexcusable by the probably long lived.

Again thanking you for the kindness you bestowed, permit me to repay your politeness whenever I can serve you.

Respectfully,

T. S. LAMBERT, M. D., President.



"Life Insurance is a humbug, a swindle."

"Life Insurance is the greatest blessing ever invented."

Can Both be True ?-Yes.

" How can that be?"

Ordinary so-called life insurance, at best, is very inequitable; usually for the most part speculative, gambling, and deceptive, and has no right to be called by that name, which it has disgraced.

True, PURE LIFE INSURANCE is equitable, the best means of relieving anxiety, giving a peaceful mind in regard to the pecuniary protection of a family, and worth much mere than the cost to the probably Long-lived.

The Insurance Journal of Hartford says, "In Illinois the death losses to the companies are double, Kentucky more than double, Michigan 50 pr. ct. more than in Connecticut."

What sense then, or equity, in making a New England best grade man pay the same premium as a person in those states pays?

Is it not an imposition upon him? Yet the same premium is charged to all of the same age in every company, except in the

#### AMERICAN POPULAR LIFE INSURANCE COMPANY.

It alone **Grades** and **Rates** each person according to his individual probabilities of living,—deduced from his

# Ancestry, Constitution, Habits, Vocation,

## Residence, Intelligence, Instincts, Health, Age, &c.

thus giving to each person the advantage or disadvantage of his own peculiar life characteristics, greatly favoring the probably long-lived, which most of New England's sons are.

To be graded and rated costs nothing; is very useful, even if no insurance is wanted. Send for a Blank,

# LEAST Term-Life (Labor-Term) Insurance—" Natural Premium"; SECURE.

Hon. OLIVEE PILLSBURY, N. H. Insurance Commissioner, unanimously allowed to be one of the most discreet and discerning of men, was the first of Commissioners to plainly state in a Report the value of Term-Life Insurance: He says,

"A Term-life policy to tide over the uncertain results of business enterprises, or the period in which the family is dependent upon its natural supporter, viz.: before children arrive at a suitable age to provide for themselves, is a valuable possession. This form of policy is commending itself to general favor."

The recent Report of the Missouri Commissioner speaks equally strongly to the same point.

Other companies—for good reasons—not being able to apply these ideas, so valuable to the probably long-lived, "make faces" and "call names" at this Company, and try to show that the more a man pays for even a poorer thing the better off he is. Let the probably long-lived hear what they say, but also get our documents, and then judge of the facts.

Insurance can be made through the mail. If an agency is not near, send for Documents, (enclose stamp.) to American Popular Life, 419 & 421 Broadway, N. Y.

Remember that Insurance to the probably long-lived costs less in this Company than in any other.

# TRIUMPHANT SUCCESS!

"Nothing Succeeds Like Success,"-French Proverb.

Ninth Year.—Death Losses, 3.56 per each 1,000 Policies, all Grades. Best Grade, only 1 Loss per 1,000. Average in all Companies (1873, Mass. Report), 11.9.—Highest, 18.00. Lowest, 6.00.

ANOTHER YEAR OF THE MARVELOUS SCIENTIFIC RESULTS OF THE
APPLICATION OF THE PRINCIPLES OF

# BIOMETRY, OR THE MEASURE OF LIFE.

What is that?

It is the science and art of prevising the probable length of life of a person—deducing it from his Ancestry, Constitution (the measure in size, form, color, and constitution of its various parts, being the signs and Indications), Habits, Vocation, Residence, Intelligence, Instincts, Health, Age, and whatever else, if else there be, which can affect the potentialities of life.

By the application of this science, Life Risks can be graded and rated as in Fire and Marine insurance; and thus, and only thus, can Equity to all Classes, and the Lowest Cost of Premiums to the Best Grades, with perfect security be obtained.

LOWEST

# TERM-LIFE (LABOR-TERM) INSURANCE, SECTION OF SECTION OF

What is That?

It is adapted to secure to a family, in case of the decease of the bread-winner during the period of his productive labor, an income correspondent to the yearly avails of that labor.

"Natural-Premiums" is the true plan of "pay the yearly cost," or "pay as you go," and put nothing into a company which, both on account of cost and security, may better be kept ENL'S by the assured.

The two scientific ideas above named are as yet fully applied only by the

# AMERICAN POPULAR LIFE INSURANCE CO.

The idea of **Grading** and **Rating** Life Risks cannot be applied by any other company already started, since, if it should adopt the method of grading, the best risks now insured in it would of course drop their present policies to take out better ones, to wit, at the lower premiums to which they are entitled; but the inferior risks would stay, and pay the premiums so much less than they ought to be for them.

The idea of *Term-Life* "Natural Premiums" is not applied by the other companies, because, as they say, they would not, on their "average" plan of taking all insured persons at the same premiums, get enough to cover the expense of their numerous losses.

Hence, all other companies "make faces" at the American Popular, and "call names," about which it does not care a fig, if it can only, as it does, secure the approbation of the scientific and thoughtful, and the patronage of the probably long-lived.

Send for Documents (with postage-stamp), to

419 & 421 BROADWAY.

NEW YORK.